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ABSTRACT

As the fourth in a series of investigations of teacher power in the classroom, a study focused primarily on extending and refining the classification of behavior alteration techniques (BATs) and behavior alteration messages (BAMs) that teachers report as representative of the classroom environment. The study took place in three phases. First, elementary and secondary teachers generated lists of BAMs. Then teachers, regrouped by grade level, placed the BAMs they had generated into previously defined and newly created BAT categories. Finally, additional teachers responded to each BAT in terms of self-use, use by other teachers, and effectiveness. Four BATs were found to be highly effective and frequently used by the teachers sampled: immediate reward from behavior, deferred reward from behavior, self-esteem, and teacher feedback. (The paper discusses interpretations of findings in terms of classroom management vs. teacher-discipline, and includes tables of findings.) (EL)

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POWER IN THE CLASSROOM IV: TEACHER COMMUNICATION TECHNIQUES AS ALTERNATIVES TO DISCIPLINE

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POWER IN THE CLASSROOM IV: TEACHER COMMUNICATION TECHNIQUES AS ALTERNATIVES TO DISCIPLINE

Abstract

This study is the fourth in a series of investigations concerned with teacher power in the classroom. This project was primarily designed to extend and refine the classification of behavior alteration techniques (BATs) and behavior alteration messages (BAMs) that teachers report are representative of the classroom environment. In phase 1, elementary and secondary teachers generated lists of BAMs. Phase 2 involved grouping teachers by grade level taught and having them place their BAMs into previously defined BAT categories. Teacher groups also created and labeled new BAT categories from those BAMs which clearly could not be placed into a prior typology. Phase 3 had additional teachers respond to each BAT in terms of self-use, use by other teachers, and effectiveness. Findings focus on BAT availability, classroom-representative BAMs, frequently and infrequently used BATs, perceived use of BATs by other teachers, perceived BAT effectiveness, and potential predictors of teacher BAT employment. The data allowed for precise probes into teachers' use of BATs and BAMs. Interpretations are discussed in terms of classroom management vs. teacher-discipline.

POWER IN THE CLASSROOM IV: TEACHER COMMUNICATION TECHNIQUES AS ALTERNATIVES TO DISCIPLINE

"If anything could ever had been made real by wishing for it or wanting it, we would have made disciplined students the norm long ago..." (Wlodkowski, 1982, p. 2). Demands for disciplined and obedient students are a clearly defined part of our cultural orientation. The public continues to clamor for more classroom discipline; citing that uncontrolled students are the number one problem facing our schools (Gallup, 1981). In this way, discipline is construed as the panacea for all learning-related problems. Educators are retained and tenured on their ability to make students learn. Surveys of elementary and secondary teachers indicate that good teaching in their schools is equated with student control (e.g., Hoy, 1968). Experienced teachers and administrators most frequently advocate a rigidly disciplined classroom and are quick to reprimand beginning instructors for their permissiveness (Hoy, 1968). The pervasiveness of the disciplinarian mentality is staggering (c.f., Willever & Jones, 1963; Check, 1979).

Ironically, discipline alone may actually work against learning (c.f., Hoy, 1968; Glasser, 1978). Highly disciplined schools fail to stimulate greater learning and are generally associated with increased incidences of student misbehaviors (Wlodkowski, 1982; Lufler, 1978). No research evidence suggests that more or better discipline in and of itself, leads to greater teacher effectiveness (c.f., Wlodkowski, 1982). On the contrary, teachers who employ frequent discipline interventions tend to find their classrooms even more disruptive and hard to manage (Rutter, Maughan, Mortimore, Ouston & Smith, 1979). More rules, harsher penalties, and "get tough" policies fail to gain student compliance and conformity (Clegg & Megson, 1968; Heal, 1978; Lufler, 1978).

Historically, corporal punishment has been the most notable means of imposing discipline. Advocates claim that the educational system is handicapped without the implicit or explicit threat of punitive sanctions (Coy, 1980). Educators often assert that corporal controls are an expedient way of managing student misbehaviors. Parents also demand teacher authority through physical punishment; indicating that such measures are good for some students. Others, against corporal actions, indicate that punishment leads to student rebellion and revenge. Moreover, it is argued that such controls set up inappropriate, punitive models that interfere with affective learning; and discourage educators from employing other forms of control in managing their classrooms (Coy, 1980). In schools where corporal punishment has been restricted, however, teachers have been left wanting. What alternative control techniques are available to public school professionals? The present investigation attempts to expand upon and clarify what is known about teachers' use of management strategies in the classroom. Of primary concern in this study were the available alternative teacher communication techniques which can be employed to optimally control student behaviors requisite for learning.

The Research Program

This study is the fourth in a series of research efforts designed to explore teachers' use of power in managing the classroom. Power in the classroom refers to the teacher's capacity to influence students to do something they would not have done had they not been influenced (McCroskey & Richmond, 1983). Thus, the ability of teachers to employ power impacts the effectiveness of their classroom management. Power strategies are actually behavior alteration techniques that teachers communicate to control or modify student actions (Kearney, Plax, Richmond & McCroskey, 1983). Since learning requires that teachers assume control in order to optimize classroom environments conducive to learning, teachers must "strategically communicate messages that

compel students to engage in learning" (Kearney, et al., 1983, p. 1). Consequently, power strategies are critical for managing the classroom.

Within this research program, Study 1 examined both teacher and student perceptions of the frequency and type of power strategies used in the classroom (McCroskey & Richmond, 1983). Study 2 investigated teachers' use of power and student learning outcomes (Richmond & McCroskey, in press). Study 3 focused on the generation of a power typology which included a variety of behavior alteration techniques and representative behavior alteration messages that teachers can employ in the classroom. This fourth study was designed to further explore the use of power in the classroom by expanding and refining the classification of behavior alteration techniques and messages that teachers report are representative of the classroom environment. The result of this investigation is a comprehensive, classroom-relevant taxonomy of alternative behavior alteration techniques that teachers can and do employ to modify or elicit student behaviors. As with earlier investigations, the research and thinking in the areas of power and classroom management provided directions for the present study.

Classroom Management

Discipline has been traditionally linked to control: "Student acceptance of or submission to teacher authority" (Wlodkowski, 1982, p. 2). There is little doubt that this perspective was especially pertinent to historical interpretations where schools were conceived as despotic structures (Waller, 1932). In early discussions, teachers were defined as dominating rulers; and students as "subjects" to be "civilized" (c.f., Waller, 1932; Durkheim, 1961; Boocock, 1983). In this way, students were expected to submit to teacher authority (Waller, 1932; Wlodkowski, 1982; Hoy, 1968). This long-standing teacher/student characterization is still reflected in the contemporary custodial orientation toward education.

Administrators and teachers who communicate impersonality, mistrust, and pessimism to students reflect a custodial environment. Such schools emphasize autocracy, teacher dominance, rigidly-defined teacher/student role hierarchies, and strict, unilateral teacher control (Hoy, 1968). Novice teachers quickly shed permissive pupil control idealogies advocated in their training programs and adopt an increasing custodial orientation after their student teaching experience and again, after their first year of teaching (Hoy, 1968). These noticeable teacher changes are alarming when evidence indicates that custodial-type schools are no longer effective in controlling student behavior (c.f., Glasser, 1978; Lufler, 1978; Wlodkowski, 1982).

While traditional schools may have defined discipline as the optimal goal, contemporary educators can ill afford to demand student submission as a function of teacher authority (Glasser, 1978; Rutter, et al., 1979). In this decade, "education for education's sake" holds little meaning for our youth. While formal education may have been equated with political, social, and economic opportunities in the past, students question the relative efficacy of education meeting those obligations today. According to Boocock (1983) the current crisis in education is a function of credential inflation and surplus absorption. That is, students no longer believe that academic credentials ensure them of either professional opportunities or the training necessary for on-the-job performance. Additionally, students may view schools as "holding places" where young people are kept so as to exclude them from a workplace already glutted. Consequently, formal education has lost most of its value for our youth. This declining value of education inevitably leads to a loss of teacher authority (Boocock, 1983). Discipline techniques designed to make students learn then, may have little or no effect.

In response to these concerns, instructional researchers have recently focused on student control as it directly relates to learning (Hoy, 1968).

Given this contemporary perspective, effective teachers are competent in both instructional (i.e., instructional technologies, learning objectives, content, and evaluation) and classroom management skills. Within the context of classroom management, discipline loses its name, meaning, and pervasive emphasis (c.f., Rutter, et al., 1979; Wlodkowski, 1982). Instead, classroom management refers to those teacher behaviors which "produce high levels of student involvement in classroom activities, minimal amounts of student behaviors that interfere with the teacher's or student's work, and efficient use of instructional time" (Emmer & Everson, 1981, p. 342).

Consistent with this orientation, Richmond and Andriate (1982) define classroom misbehavior as any student behavior that interferes with learning. Effective managers then, are able to both encourage behaviors appropriate for learning and reduce student misbehaviors. In this way, students assume a more positive stance relative to the overall learning environment. Rather than forcing students to learn in the antiquated discipline sense, the teacher creates and manages a classroom where techniques are employed to influence students to <u>want</u> to learn. Two separate research areas have converged on this problem. One area emphasizes the encouragement of on-task behaviors and the other, the reduction of student misbehaviors. While these emphases address classroom management from different points of departure, both ultimately prescribe conditions which lead to management effectiveness.

From the first perspective, student involvement or initiating and maintaining on-task behaviors are necessary conditions for effective classroom management. The use of prompts (Krantz & Scarth, 1979), positive questioning techniques (Borg & Ascione, 1979), motivational messages, structured transitions (Arlin, 1979), teacher-led group activities (Good & Beckerman, 1978) and other teacher strategies all promote greater task persistence. The second perspective is represented in the body of research on control techniques

designed to minimize student disruptions or misbehaviors. Unlike discipline, these control strategies are inextricably tied to learning or on-task behavioral requirements. As such, while student misbehaviors are discouraged, these approaches provide concurrent rewards for appropriate behaviors conducive to learning. Such positive control techniques include token economy (Jenson, 1978), behavioral contracts (Harris, 1972), incentive systems (Emmer & Evertson, 1981), extinction, reinforcement, time-outs (Shrigley, 1979), and others.

Most recently, a third perspective on classroom management has emerged from the instructional communication literature (McCroskey & Richmond, 1983; Richmond & McCroskey, in press; Kearney, et al., 1983). The most recent research in this area (Kearney, et al., 1983) examines the application of behavior alteration techniques. This approach examines classroom management from both a relational and message-based orientation. In contrast to other perspectives on classroom management, this approach is based on teacher's use of power in the classroom.

Power in the Classroom

For the purpose of classroom management, power-based strategies refer to the teacher's potential to impact student on-task behaviors and student disruptions to learning. The most suitable framework for defining power-based strategies within the classroom is provided by French and Raven (1968). McCroskey and Richmond (1983) interpreted this conceptualization for their research on power in the classroom. Within the classroom, coercive power emanates from student perceptions that he/she will be punished by the teacher if he/she fails to comply with the teacher's influence attempts. Reward power is based on student perceptions that he/she will be rewarded if the student complies with teacher demands. Legitimate or assigned power refers to student perceptions that the teacher has the right to prescribe behavior. Referent

power is based on the student's wish to comply in order to please or identify with the teacher. Finally, expert power refers to the student's desire to comply because he/she perceives the teacher is competent in specific areas.

In the first of a series of studies, Power 1 (McCroskey & Richmond, 1983) examined teachers' and students' perceptions of teacher use of each of these five types of power in the classroom. Junior high, senior high, and college teachers and their students were found to share somewhat similar perceptions. Both teachers and students perceived that reward, referent and expert power were employed more frequently than either legitimate or coercive. However, teachers perceived they used more expert power than did their students, while students perceived their teachers using more coercive power than did their teachers.

Power 2 (Richmond & McCroskey, in press) examined the effects of power type/usage on students' affective and cognitive learning. Employing a sample similar to Power 1, results indicated that teacher use of coercive and, to a lesser degree, legitimate power were negatively related to both affective and cognitive learning. However, both referent and, to a lesser degree, expert power were positively related to both learning outcomes. Reward power was not found to be meaningfully associated with learning.

The results of Power 1 and 2 provide indirect support for contemporary beliefs about discipline in the classroom. Teacher authority and discipline in the traditional sense have little or no meaning in today's classroom. That is, Power 1 demonstrates that influence in the classroom is relational. Teachers do not automatically possess power; students must perceive its existence. According to teacher and student perceptions then, power and subsequent influence evolve relationally within the classroom. Secondly, Power 2 reported that legitimate or assigned power as well as coercive or punishment power were both negatively associated with learning. These types of emergent power

most closely resemble authority and discipline. These power types then, may be detrimental to classroom management. Such influence attempts may fail to either encourage on-task behaviors or discourage misbehaviors requisite for optimal learning.

Based upon these findings, Power 3 (Kearney, et al., 1983) was designed to expand the bases of power available to teachers and thus broaden the range of alternatives available to teachers in their efforts at classroom management. This third investigation focused on the generation of an initial list of potential power strategies for classroom use. A college student sample was employed to generate an open-ended list of potential influence statements. This list was coded into a typology of 18 behavior alteration techniques (BATs) which were best represented by a combination of statements or behavioral alteration messages (BAMs). Each unique set of BAMs provided an inductive basis for labeling each of the 18 separate BATs. The groupings of BAMs were then given to elementary and secondary teachers to assess usage and effectiveness in changing behavior in the classroom. Teachers reported that seven of the BATs were frequently used and perceived as effective. Results also indicated that teacher use of BATs was not meaningfully associated with instructor gender, grade level, and years taught.

Overall, the results demonstrated that power need not be restricted to direct teacher appeals. That is, teacher power need not rely on externally-based sanctions. Unlike the bases of power explicated in Power 1 and 2, BATs employed in the classroom can be indirect. In other words, additional BATs that teachers reported they frequently used were "student-centered," referencing inherent student benefits through compliance. Most pertinent to the classroom environment specifically, teachers reported they also relied on "student audience effect" techniques or those strategies which appeal to students' peers and reference groups for compliance.

Research Questions

Defining effective teaching from a classroom management perspective constructively diverges from traditional views of instruction. While numerous teachers are still forced to operate within a custodial orientation, the research evidence indicates that discipline cannot be the goal of instruction. In fact, the classroom management literature suggests that discipline "may actually be a force against learning" (Wlodkowski, 1982, p. 5). Effective managers are those who view student control only as it relates to the over-riding goal of learning. Instead of emphasizing discipline then, classroom managers seek to gain student compliance by shaping an optimal learning environment which encourages learning. Behavior alteration techniques offer teachers a useful approach to achieve this objective by communicating student-centered messages that offer reasons for compliance.

Thus far, the generation of an initial pool of BATs has relied on college student reports (Kearney, et al., 1983). Unlike previous research on compliance-gaining strategies (c.f., Marwell & Schmitt, 1967; Miller, Boster, Roloff & Seibold, 1977; Cody, McLaughlin & Jordan, 1980; and Schenck-Hamlin, Wiseman & Georgacarakos, 1982), the format employed in generating BATs purposefully omitted hypothetical scenarios or reference to specific relationships in order to elicit a wide range of potential responses. While this approach was essential for an initial, comprehensive list of BATs, the results of Power 3 suggest that additional BATs may exist for the classroom. That is, the uniqueness of "student-centered" and "audience effect" techniques obtained in Power 3 indicate that classroom strategies are qualitively different from other compliance-gaining typologies. Thus, the present study was designed to extend, validate and refine the BAT typology through teacher input. Additionally, classroom relevant BAMs which represent each technique are more appropriately derived from sources of those messages themselves, teachers.

Therefore,

Research Question 1: What types of behavior alteration techniques are available for teacher use in the classroom?

Research Question 2: What representative messages do teachers generate when they employ each BAT?

Based on the revisions of both BATs and BAMs specifically applicable to the classroom, the third question was asked in order to isolate those techniques teachers use most and least frequently with their students.

Research Question 3: What BATs do teachers perceive they employ most frequently; least frequently?

Power 3 (Kearney, et al., 1983) suggested that teachers employ primarily positive BATs in the classroom. However, earlier research indicates that teachers are more likely to submit to a more discipline-oriented model of student control (Hoy, 1968). Either teachers are unwilling to report or they are unaware that they frequently use such custodial forms of control. According to student perceptions, coercive power is more frequently used than teachers report (McCroskey & Richmond, 1983). By assessing what strategies teachers perceive other teachers employ, teachers may be more willing to accurately identify additional BATs being used in the classroom. Therefore,

Research Question 4: What BATs do teachers perceive other teachers employ for the same grade level taught?

Since teachers may report they use one set of BATs and report other teachers employ a different set, the fifth research question was asked to determine teachers' perceptions of the relative effectiveness of each BAT. Therefore,

Research Question 5: What BATs do teachers perceive to be effective in the classroom?

Finally, Power 3 (Kearney, et al., 1983) failed to demonstrate any meaningful association between specific teacher variables and the selection and perceived effectiveness of BATs employed in the classroom. However, the

revised BATs and BAMs as well as the inclusion of other teachers' use of BATs may produce quite different results. Therefore,

> Research Question 6: Are the BATs teachers perceive they use; those they perceive other teachers use; and those BATs they find effective a function of:
>
> (a) instructor gender,
> (b) number of years teaching, and/or
> (c) grade level taught?

Procedures

Data Collection

Data for this study were collected in three phases. The first two phases involved the same group of subjects. The third phase employed subjects not involved in the previous phases.

Phase One. A total of 343 teachers in grades K-12 were provided a form with the following instructions:

> As a teacher you often try to get your students to do things that they may not want to do. The student usually thinks, and often asks, 'Why should I do this?' Please give us the most common answers you would give to this question.

The form provided 25 numbered spaces for responses. Subjects were informed that if they had more responses they should provide those on the back of the form.

Subjects in this phase were enrolled in a basic graduate course in communication in instruction. The form was administered the first day of class before any instruction in the content of the course. The teaching experience of the subjects ranged from one to 37 years.

Phase Two. The subjects from Phase One were divided into 55 groups of 5-7 members representing level of grade taught (K-3, N=10; 4-6, N=10; 7-9, N=9; 10-12, N=9; Other, N=17). While most of the subjects taught in the clearly distinct categories within the elementary or secondary schools, an "other"

category was necessary to accomodate subjects who taught at multiple levels (speech pathologists, music teachers, special education teachers, etc.).

Each group was provided a copy of the behavior alteration technique categories and representative messages generated in the Kearney, et al. (1983) study (see Table 1). They were also provided a form with each category label. Substantial space was provided between labels on the forms. Each group was asked to go over the messages they had generated in Phase One and place the ones they could in the categories provided. After they had completed this task, they were asked to review the messages they had been unable to classify and attempt to group them in new categories and to label the new categories.

Phase Three. On the basis of the results of the first two phases (discussed below) 22 categories of behavior alteration techniques with representative behavior alteration messages were generated (see Table 3). Subjects (N=402) were provided a form which included the 22 BATs and corresponding message examples. The subjects were asked to indicate (on a 1-5 scale, 5 = high) how frequently they use each of the techniques, how frequently they believed other teachers at their same grade level use the technique, and how effective they perceived the technique to be in modifying student behaviors at that grade level. The subjects were also asked to indicate how many years they had taught, the level at which they taught, and their sex. The range of experience was 1-24 years with a mean of 4.8 years. There were 66 males and 336 females in the sample. The sample size for each level taught was as follows: K-3, 115; 4-6, 81; 7-9, 56; 10-12, 66; Other, 84.

Data Analyses

The data from Phase One and Phase Two were analyzed to obtain answers to our first two research questions. The data obtained in Phase Two (group responses) were examined to determine the number of groups at each teaching

level which generated behavior alteration messages which the group could classify for each of the Kearney et al. (1983) BAT categories. In addition, these data were examined to determine whether the groups had generated categories beyond those provided them. Potential new categories were rejected only if all of the behavior alteration messages provided as examples could clearly be classified in one or a combination of the Kearney et al. (1983) categories by two of the investigators. All other new categories were accepted. Finally, all of the responses from Phase One were classified by the investigators into Kearney et al. (1983) categories plus the new categories generated by the analysis of the Phase Two data. The unclassifiable messages (approximately two percent) were examined to determine whether additional categories could be formed.

In a supplementary analysis (for which no research question was posed in advance) a sample of 1217 behavior alteration messages was drawn from the total responses provided in Phase One (total was slightly in excess of 3650 responses). These messages were classified into three categories: prosocial (e.g., reward-type), anti-social (e.g., punishment and legitimate types), and other. This analysis was performed to determine whether there was either a pro or anti-social bias in the data obtained. The analysis indicated there were 542 prosocial messages, 535 anti-social messages, and 140 which were classified as other. Since there was no apparent pro or anti-social bias, this issue was not considered subsequently.

The data from Phase Three were analyzed to obtain answers to research questions 3-6. To determine frequency of self-use, other-use, and perceived effectiveness of each of the techniques, means for each response across the entire sample were computed. In addition, frequency analysis was performed to determine the percentage of respondents reporting high (4 or 5) use or effectiveness and of those reporting low (1 or 2) use or effectiveness.

To determine whether teacher sex, length of teaching experience, or level taught impacts perceived use or effectiveness of the techniques, multivariate analyses of variance were computed for each of these predictors with the use and effectiveness responses as criterion variables. Where significant multivariate results were obtained, univariate analyses of variance were computed to probe the results.

Finally, since the data on use and effectiveness were collected during the same sitting, correlations among responses were examined to determine the existence of any meaningful patterns. Separate factor analyses were computed for self-use, other-use, and effectiveness. A liberal criterion of an eigenvalue of 1.0 was set for termination of factor extraction. Both orthogonal and oblique rotational analyses were examined. In addition, the unrotated analyses were examined. A minimum loading of .60 was set for considering an item loaded on a factor. In addition to the factor analyses, the correlations were computed between responses for self-use and other-use, self-use and effectiveness, and other-use and effectiveness for each BAT.

Results

Phases One and Two

Analysis of the data provided by the various teacher groupings indicated that instructors at each teaching level, generated behavioral alteration messages for each of the original 18 BAT categories (Kearney, et al., 1983). However, no particular BAT was represented by a spontaneously generated message from any single member in any of the groups sampled (see Table 2). The BATs for which the most groups reported messages were Reward from Behavior and Legitimate-Personal Authority. The fewest groups reported messages for Personal Relationship-Negative, Debt, and Referent-Model. Clearly, all of the BATs generated by the student sample employed in the Kearney et al. (1983) research are appropriate for teachers. However, some BATs seem to be more a

part of what teachers indicate they use than others.

Four new BATs were generated in the data provided by the teacher groups. These were labeled Deferred Reward from Behavior, Punishment from Others, Peer Modeling, and Teacher Feedback. The first of these represents a splitting of the original BAT of Reward from Behavior into two categories -- Immediate and Deferred. Punishment from Others, similarly, represents an additional BAT stemming from the Punishment from Source and Punishment from Behavior categories in the original study. The Peer Modeling BAT represents the splitting of the Referent-Model category into Teacher Modeling and Peer Modeling. The final BAT, Teacher Feedback, represents a completely new category. Each of these new BATs was generated across several of the teacher groups, although the labels which were attached by the teachers were not all identical.

Less than two percent of the spontaneously generated messages from Phase One could not be classified into the original BAT categories or the four new categories. Almost all of these came from teachers who clearly did not understand the assignment or provided responses which the investigators could not interpret (i.e., "It is 2:30," "Tell a joke," "Are you passing all your other classes?"). No new BAT could be generated from these responses.

On the basis of these results the 22 BATs appearing in Table 3 were included in Phase Three of the present study. Additionally, the sample statements used by Kearney et al. (1983) were modified by including specific statements generated by the teachers in Phases One and Two. Also, some of the labels for the BAT categories were modified to relate specifically to the teacher-student relationship (see Tables 1 and 3).

Phase Three

Table 4 reports the mean self-use, other-use, and effectiveness scores for each of the BATs. The percentage of respondents indicating high or low use or effectiveness is also reported.

Employing a majority percentage criterion, four of the BATs were found to be frequently used by the teachers sampled: Immediate Reward from Behavior, Deferred Reward from Behavior, Self-Esteem, and Teacher Feedback. Employing the same criterion, ten of the BATs were found to be infrequently used: Punishment from Behavior, Punishment from Teacher, Punishment from Others, Guilt, Teacher/Student Relationship-Negative, Legitimate-Teacher Authority, Debt, Altruism, Peer Modeling, and Teacher Modeling.

Results with regard to the teachers' perceptions of the use of the BATs by other teachers at their same grade level were substantially different. A majority reported that six techniques are frequently used by other teachers: Immediate Reward from Behavior, Deferred Reward from Behavior, Punishment from Teacher, Legitimate-Higher Authority, Legitimate-Teacher Authority, and Teacher Feedback. In contrast, a majority of the teachers reported only four techniques are infrequently used by other teachers: Punishment from Others, Guilt, Teacher/Student Relationship-Negative, and Debt.

In terms of effectiveness, the majority of the teachers reported only four techniques are highly effective: Immediate Reward from Behavior, Reward from Teacher, Self-Esteem, and Teacher Feedback. In contrast, a majority reported that eight techniques are ineffective: Punishment from Behavior, Punishment from Teacher, Punishment from Others, Guilt, Teacher/Student Relationship-Negative, Legitimate-Teacher Authority, Debt, and Teacher Modeling.

The multivariate analyses for the impact of teacher sex on perceived use and effectiveness were all significant ($< .0001$). Table 5 reports the results of the univariate analyses. Only four analyses yielded significant results for self-use. Females were found to use Immediate Reward from Behavior, Self-Esteem, and Teacher Feedback more than males. Males were found to use Expert Teacher more than females. Results were significant on three BATs for other-use.

Females reported that other teachers use Immediate Reward from Behavior, Self-Esteem, and Teacher Feedback more often than males reported they did. With regard to effectiveness, significance was obtained only for Self-Esteem and Teacher Feedback. Females reported both BATs were more effective than did the males.

The multivariate analyses for the impact of teaching level on perceived use and effectiveness also were all significant ($< .0001$). In these analyses, the subjects in the "other" category were omitted due to the very diverse nature of the members of the group. Table 6 reports the results of the univariate analyses.

Results relating to self-use were significant for six BATs. Teachers in the upper grades reported more use of Deferred Reward from Behavior, Punishment from Teacher, Debt, and Expert Teacher. Teachers in lower grades reported more use of Reward from Teacher and Reward from Others.

Significant results were obtained for eight BATs pertaining to other-use. Teachers in upper grades reported their colleagues use more Deferred Reward from Behavior, Punishment from Teacher, Legitimate-Higher Authority, Debt, and Teacher Modeling. Teachers in lower grades saw their colleagues using more Immediate Reward from Behavior, Reward from Others, and Self-Esteem.

In terms of effectiveness, only two results were significant. Teachers in upper grades saw Deferred Reward from Behavior as more effective while teachers in lower grades saw Reward from Teacher as more effective.

The multivariate analyses for the impact of years of teaching experience were all non-significant. Thus, on the basis of the data obtained, teaching experience does not appear to alter teacher's use of BATs nor their perceptions of their colleagues' use, or the effectiveness of the techniques.

An examination of the factor analytic results indicated no meaningful factor structure for the BAT items for self-use, other-use, or effectiveness.

On the unrotated factor solutions, no item met the .60 eigenvalue criterion, strongly suggesting the presence of multiple factors. However, rotated solutions which produced five factors indicated no factor included more than two items with high loadings. Thus, even though there were some meaningful correlations between BAT category scores, there did not appear to be an underlying structure which would permit reduction in the number of categories employed.

The obtained correlations among ratings of self-use, other-use, and effectiveness for the 22 BAT categories are reported in Table 7. All of the obtained correlations were significant and most were moderate to moderately high. Clearly, these perceptions are not independent. Generally, the higher correlations were between self-use and effectiveness. This would appear reasonable, since it should be expected that teachers would choose to use techniques which they believe will be effective. The very substantial correlations between self-use and other-use are more difficult to interpret. These relationships may indicate the presence of patterns of BAT use that are relatively consistent across teachers in a given school. However, they may also be a function of teachers not really knowing what their colleagues do and, as a result, responding to our instrument with their own behavior heavily influencing their perceptions.

Discussion

Consistent with the primary objective of this study, a revised and extended typology of classroom-relevant behavior alteration techniques (BATs) and messages (BAMs) was generated. Research Question 1 was asked in order to isolate classroom strategies available for teacher use. Based on teacher input, the original 18 BATs (Kearney, et al., 1983) were modified to enable more precise discriminations among existing strategies and extended to include new categories. These modifications suggest that strategies teachers employ

in the classroom are in some cases similar to existing compliance-gaining typologies, but are qualitatively different in several fundamental ways.

The first difference is that teachers employ BATs that rely on direct as well as mediated appeals. That is, teachers may provide either direct rewards and punishers (among others) to obtain compliance, or mediate those appeals by referencing students' peer groups as sources of power. Second, teachers employ BATs that exemplify the evaluative role of teachers in the classroom environment. Teacher Feedback obtains compliance by calling attention to the teacher's task-oriented objective, to assess student learning and teaching effectiveness. Third, while several of the BATs may seem similar to existing compliance-gaining strategies in the abstract sense, teachers appear to be constrained by the specific types of messages they generate to employ each BAT. Accountability to students, parents, and administrators may require that teachers selectively employ BATs by communicating BAMs that are appropriate to teachers as student role models.

Further modifications of the available BATs for teacher use was addressed in Research Question 2. Whereas the BAMs derived in Power 3 (Kearney, et al., 1983) relied on college students' input, in this study teachers themselves generated classroom-relevant messages. These teacher BAMs were an obvious extension and revision of those previously isolated. Blending the former BAMs with teacher BAMs resulted in empirically refined configurations of classroom-representative BAMs. These configurations then, can now serve as sets of operational statements for each BAT that teachers use.

Based on the revised BATs, Research Question 3 was concerned with those BATs teachers use most and least frequently. Similar to the results obtained from Power 3 (Kearney, et al., 1983), teachers reported they used primarily reward-type or prosocial BATs. However, teachers in this sample did not indicate they most frequently employed "student audience effect" type BATs

or mediated appeals. Instead, teachers rated highly a new BAT, Teacher Feedback. Additionally, teachers claimed to use least frequently those BATs which were primarily punishment-oriented or anti-social. These findings would seem to suggest that teachers in this study were better able to discriminate among BATs and BAMs since category labels and messages were refined to be more clearly representative of classroom-specific applications.

Research Question 4 was asked to explore those BATs instructors perceived other teachers used with students at the same grade level. While pro-social and Teacher Feedback BATs comprised half of the list of strategies most frequently used by others, teachers also perceived others frequently using a variety of anti-social BATs. Whereas teachers may be reluctant to report using anti-social BATs themselves, these results indicate that teachers can readily identify their use with other teachers. Perhaps teachers are guilty of projection: "A friend of mine has this problem..." Given this interpretation, teachers may employ both pro and anti-social BATs. Such use is supported by the initial classification of messages teachers generated in Phase 1. Teachers consistently recalled almost equal frequencies of both pro and anti-social messages. Furthermore, the results of Power 1 (McCroskey & Richmond, 1983) indicated that students perceived their teachers using more coercive power than did their teachers.

Teachers also appear to be selective in their use of anti-social BATs. That is, teachers reported that other teachers <u>least</u> frequently used other types of anti-social BATs. An examination of anti-social BATs most and least frequently employed suggests that teachers perceive others using anti-social BATs that reflect legitimate power or teacher authority and rarely rely on student or peer sources of punishment. This observation is consistent with the custodial model of classroom discipline. Following this model, new teachers are encouraged to and evaluated on their ability to adopt this authority-based discipline orientation (Hoy, 1968).

Interpreting the results pertinent to Research Question 5, teachers perceived that the BATs they most frequently used themselves were also most effective in controlling student behavior. Similarly, those they found least effective were also the BATs they least employed. Generally, effective BATs were primarily prosocial, whereas ineffective BATs were primarily anti-social. While reward-type strategies may be effective for optimizing student control, Richmond and McCroskey (in press) found the use of reward power was not meaningfully associated with student learning. This result questions the relative efficacy of prosocial BATs for classroom management.

No single anti-social BAT was perceived effective. However, teachers perceived that others frequently use anti-social BATs. Perhaps teachers recognize that such BATs are ineffective, but resort to their use, regardless. Potentially, the custodial expectation of their school systems may mandate the use of more traditional sources of discipline. Teachers might also employ such strategies simply because they prefer the use of punishment to control student misbehaviors (Siggers, 1980), in spite of its ineffectiveness.

Finally, Research Question 6 asked whether teacher use, others' use, and effectiveness of BATs were a function of teacher sex, years taught, and grade level. Results indicated that primarily prosocial BATs were perceived used and effective by female teachers significantly more than males. In contrast, male teachers found the use and effectiveness of Expert Teacher significantly more than females. These findings reflect the influence of traditional sex-based roles. That is, females may employ BATs that indicate responsiveness to and support of the student (e.g., "You will enjoy it," "You always do such a good job," "To see how well you can do it"). Males, however, may rely on self-perceptions of their own credibility and actively assert this stance (e.g., "This has always worked for me," "Trust me — I know what I'm doing").

Years taught was not shown to be a function of the use (self and other) or effectiveness of particular BATs employed in the classroom. Although disappointing, this result is consistent with the findings obtained in Power 3 (Kearney, et al., 1983). Different results might be obtained by eliciting experienced teachers' perceptions of inexperienced teachers' use and effectiveness of BAT employment (c.f., Hoy, 1968). In any case, this issue remains open.

Grade level data proved to be particularly interesting. While teachers reported self and others' use of prosocial type BATs for the lower grades, upper grade level teachers reported self and others' use of primarily antisocial and Expert Teacher BATs. These results are consistent with traditional elementary and junior/senior high teacher-student orientations. That is, elementary teachers may rely on a variety of reward-type strategies to control student behavior because younger students are more easily influenced by external sources of reward. Older students, however, may no longer perceive that teachers have the ability to provide relevant rewards for compliance (c.f., Boocock, 1983). Instead, teachers in upper grades may resort to punishment or demonstrate teacher competence in the content area taught. Similarly, secondary and college teachers and students have reported the frequent use of teacher expert power (McCroskey & Richmond, 1983). These same students also perceived their teachers used more coercive power than did their teachers.

One noteable exception to upper grade level self and others' use of BATs in the present study was the frequent employment of Deferred Reward. In addition, upper grade level teachers perceived Deferred Reward to be significantly more effective than lower grade teachers. While upper grade level students may not perceive teachers to have reward influence potential, these same students may rely on future sources of reward that can directly benefit

them (e.g., "It will prepare you for a job," "It will help you later on in life"). In contrast, lower grade level teachers found Reward from Teacher to be significantly more effective. Elementary students may attribute to teachers the ability to provide meaningful rewards. Further, such students may require more immediate and tangible rewards that teachers can readily provide.

The results reported here illustrate the need for a variety of additional investigations. Currently, investigations are underway which examine the types of BATs teachers employ with students of different academic abilities. In addition, the present study only assessed teacher perceptions of BAT usage in the classroom. Research is being conducted which examines student perceptions as well. Moreover, since years taught failed to predict types of BATs employed, studies should be designed to either tap experienced teachers' perceptions of inexperienced teachers or to directly observe and code BAT employment in the classroom. Finally, this continued research program on teacher power in the classroom will focus on the relative effectiveness of each BAT on both classroom management and student learning outcomes.

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Table 1
Behavior Alteration Techniques and Messages
from Kearney et al Study

Technique	Sample Messages
1. Reward from Behavior	You will enjoy it. You will get a reward if you do. It will make you happy. It will help you. You will benefit if you do.
2. Reward from Others	Others will think highly of you if you do. Others will like you if you do. Others will respect you if you do.
3. Punishment from Source	I will punish you if you don't. I will make it miserable for you if you don't. I will continue doing bad things to you if you don't.
4. Referent-Model	This is the way I always do it. People who are like me do it. People you respect do it.
5. Legitimate-Higher Authority	Do it, I'm just telling you what I was told. It is a rule, I have to do it and so do you. I don't know why, you just have to do it.
6. Guilt	If you don't, others will be hurt. If you don't, others will be unhappy. Others will be harmed if you don't.
7. Reward from Source	I will give you a reward if you do. I will make it beneficial to you if you do. I will continue to reward you if you do.
8. Normative Rules	Everyone else does it. We voted, and the majority rules. Society expects you to do it. All of your friends are doing it.
9. Personal Responsibility	It is your responsibility. It is your obligation. It is your turn. There is no one else that can do it.
10. Expert	From my experience, it is a good idea. From what I have learned, it is what you should do. This has worked for me, it should work for you too.
11. Punishment from Behavior	You will lose if you don't. You will be punished if you don't. You will be unhappy if you don't. You will be hurt if you don't.
12. Self-Esteem	You will feel good about yourself if you do. You are the best person to do it. You are good at it.

Table 1 (con't)
Behavior Alteration Techniques and Messages
from Kearney et al Study

Technique	Sample Messages
13. Debt	You owe me one. It's your turn. You promised to do it. I did it the last time.
14. Personal Relationship-Negative	I will dislike you if you don't. I will think less of you if you don't.
15. Altruism	If you do this, it will help others. Others will benefit if you do. It will make others happy if you do.
16. Personal Relationship-Positive	I will like you better if you do. I will respect you if you do. I will think more highly of you if you do. I will appreciate you more if you do.
17. Duty	Your group needs it done. Your group depends on you.. Your group will be hurt if you don't.
18. Legitimate-Personal Authority	Because I told you to. Just do it. You have to do it, it's required. You don't have a choice.

Table 2
Number of Groups Generating Behavior Alteration Messages for Each Behavior Alteration Technique

	Teaching Level					
BAT*	K-3	4-6	7-9	10-12	Other	Total
1	10	10	9	9	16	54
2	8	7	5	6	7	33
3	8	9	9	7	11	44
4	3	3	5	4	7	22
5	10	8	6	7	14	45
6	7	4	7	6	12	36
7	7	10	5	7	13	42
8	8	8	8	6	14	44
9	6	6	7	6	13	38
10	5	5	3	5	7	25
11	7	7	8	8	9	39
12	8	6	7	8	12	41
13	2	5	4	3	6	20
14	4	2	1	2	5	14
15	3	5	7	2	7	24
16	7	6	5	5	6	29
17	5	4	6	3	7	25
18	10	10	9	8	15	52
Number of Groups	10	10	9	9	17	55

*See Table 1 for BAT category labels.

Table 3
Revised Behavior Alteration Techniques and Messages

Technique	Sample Messages
1. Immediate Reward from Behavior	You will enjoy it. It will make you happy. Because it's fun. You'll find it rewarding/ interesting. It's a good experience.
2. Deferred Reward from Behavior	It will help you later on in life. It will prepare you for college (or high school, job, etc.). It will prepare you for your achievement tests. It will help you with upcoming assignments.
3. Reward from Teacher	I will give you a reward if you do. I will make it beneficial to you. I will give you a good grade (or recess, extra credit) if you do. I will make you my special assistant.
4. Reward from Others	Others will respect you if you do. Others will be proud of you. Your friends will like you if you do. Your parents will be pleased.
5. Self-Esteem	You will feel good about yourself if you do. You are the best person to do it. You are good at it. You always do such a good job. Because you're capable!
6. Punishment from Behavior	You will lose if you don't. You will be unhappy if you don't. You will be hurt if you don't. It's your loss. You'll feel bad if you don't.
7. Punishment from Teacher	I will punish you if you don't. I will make it miserable for you. I'll give you an "F" if you don't. If you don't do it now, it will be homework tonight.
8. Punishment from Others	No one will like you. Your friends will make fun of you. Your parents will punish you if you don't. Your classmates will reject you.
9. Guilt	If you don't, others will be hurt. You'll make others unhappy if you don't. Your parents will feel bad if you don't. Others will be punished if you don't.
10. Teacher/Student Relationship: Positive	I will like you better if you do. I will respect you. I will think more highly of you. I will appreciate you more if you do. I will be proud of you.
11. Teacher/Student Relationship: Negative	I will dislike you if you don't. I will lose respect for you. I will think less of you if you don't. I won't be proud of you. I'll be disappointed in you.
12. Legitimate-Higher Authority	Do it, I'm just telling you what I was told. It is a rule, I have to do it and so do you. It's a school rule. It's school policy. The principal said so.

Table 3 (con't)
Revised Behavior Alteration Techniques and Messages

Technique	Sample Messages
13. Legitimate-Teacher Authority	Because I told you to. You don't have a choice. You're here to work! I'm the teacher, you're the student. I'm in charge, not you. Don't ask, just do it.
14. Personal (Student) Responsibility	It is your obligation. It is your turn. Everyone has to do his/her share. It's your job. Everyone has to pull his/her own weight.
15. Responsibility to Class	Your group needs it done. The class depends on you. All your friends are counting on you. Don't let your group down. You'll ruin it for the rest of the class (team).
16. Normative Rules	We voted, and the majority rules. All of your friends are doing it. Everyone else has to do it. The rest of the class is doing it. It's part of growing up.
17. Debt	You owe me one. Pay your debt. You promised to do it. I did it the last time. You said you'd try this time.
18. Altruism	If you do this, it will help others. Others will benefit if you do. It will make others happy if you do. I'm not asking you to do it for yourself; do it for the good of the class.
19. Peer Modeling	Your friends do it. Classmates you respect do it. The friends you admire do it. Other students you like do it. All your friends are doing it.
20. Teacher Modeling	This is the way I always do it. When I was your age, I did it. People who are like me do it. I had to do this when I was in school. Teachers you respect do it.
21. Expert Teacher	From my experience, it is a good idea. From what I have learned, it is what you should do. This has always worked for me. Trust me - I know what I'm doing. I had to do this before I became a teacher.
22. Teacher Feedback	Because I need to know how well you understand this. To see how well I've taught you. To see how well you can do it. It will help me know your problem areas.

Table 4
Mean Self-Use, Other-Use, and Effectiveness Ratings and Frequency Percentages of High and Low Self-Use, Other-Use, and Effectiveness

	Self-Use %			Other-Use %			Effectiveness %		
BAT*	$\bar{X}$	High Use	Low Use	$\bar{X}$	High Use	Low Use	$\bar{X}$	High Effect	Low Effect
1	3.9	69	8	3.6	53	11	3.9	66	10
2	3.5	54	20	3.6	60	14	3.0	34	33
3	3.0	39	37	3.4	48	20	3.5	55	20
4	2.8	27	39	3.1	34	25	3.1	33	35
5	3.9	72	9	3.4	46	14	4.0	73	6
6	2.2	16	63	3.0	33	32	2.3	14	59
7	2.3	22	61	3.4	56	23	2.4	21	56
8	1.4	3	89	2.3	13	60	2.0	12	69
9	1.8	6	77	2.4	16	52	2.0	10	68
10	3.1	44	30	3.1	40	25	3.3	44	24
11	1.7	4	80	2.4	17	56	2.0	9	67
12	3.0	31	32	3.6	59	14	2.7	24	44
13	2.4	24	54	3.5	56	18	2.4	14	55
14	3.2	39	25	3.4	43	15	2.9	25	32
15	2.7	23	43	3.1	34	27	2.9	30	37
16	2.7	26	43	3.0	31	30	2.7	24	37
17	1.6	5	84	2.2	12	62	1.9	5	76
18	2.3	15	61	2.4	15	49	2.5	18	48
19	2.4	17	55	2.9	29	36	3.1	39	31
20	2.4	19	57	2.9	33	35	2.4	19	51
21	2.9	33	37	3.2	41	24	2.8	26	41
22	4.0	73	7	3.6	55	13	3.7	60	12
Overall	2.7	30.3	46.0	3.1	37.5	29.8	2.8	29.8	41.4

*See Table 3 for category labels.

Table 5
Mean Self-Use, Other-Use, and Effectiveness Ratings
for Significant Sex Differences

BAT	Male	Female	F	R^2
Self-Use				
Immediate Reward from Behavior	3.4	4.0	19.03	.05
Self-Esteem	3.6	4.0	8.99	.02
Expert Teacher	3.3	2.9	6.67	.02
Teacher Feedback	3.7	4.0	7.10	.02
Other-Use				
Immediate Reward from Behavior	3.3	3.6	4.69	.01
Self-Esteem	3.2	3.5	4.94	.01
Teacher Feedback	3.3	3.6	5.39	.01
Effectiveness				
Self-Esteem	3.7	4.1	12.48	.03
Teacher Feedback	3.4	3.7	6.50	.02

Table 6
Mean Self-Use, Other-Use, and Effectiveness Ratings
for Significant Teaching Level Differences

BAT	K-3	4-6	7-9	10-12	F	R^2
Self-Use						
Deferred Reward from Behavior	2.9b	3.7a	4.0a	4.0a	15.31	.13
Reward from Teacher	3.3a	3.1ab	3.0ab	2.7b	3.42	.03
Reward from Others	3.0a	2.9a	2.6b	2.5b	2.86	.03
Punishment from Teacher	2.1b	2.6a	2.6a	2.4a	3.30	.03
Debt	1.4b	1.6ab	1.8a	1.7a	2.83	.03
Expert Teacher	2.7b	3.0a	3.2a	3.1a	2.50	.02
Other-Use						
Immediate Reward from Behavior	3.8a	3.6ab	3.3bc	3.2c	5.03	.05
Deferred Reward from Behavior	3.1b	3.7a	3.9a	4.0a	14.32	.13
Reward from Others	3.2a	3.2ab	2.9bc	2.7c	4.99	.05
Self-Esteem	3.6a	3.5a	3.4ab	3.2b	2.80	.03
Punishment from Teacher	3.2a	3.5ab	3.5ab	3.8b	3.15	.03
Legitimate-Higher Authority	3.5a	3.6a	3.7ab	4.0b	2.52	.02
Debt	1.9a	2.1ab	2.4bc	2.6c	5.72	.05
Teacher Modeling	2.7a	3.0ab	3.1ab	3.3b	2.78	.03
Effectiveness						
Deferred Reward from Behavior	2.6b	3.1a	3.2a	3.4a	5.89	.06
Reward from Teacher	3.7a	3.7a	3.5ab	3.2b	2.46	.02

a, b, c Means with same subscript are not significantly different.

Table 7
Correlations Among Ratings of Self-Use,
Other-Use, and Effectiveness

BAT	Self-Use/ Other-Use	Self-Use/ Effectiveness	Other-Use/ Effectiveness
Immediate Reward from Behavior	.51	.60	.28
Deferred Reward from Behavior	.56	.57	.42
Reward from Teacher	.54	.67	.44
Reward from Others	.51	.51	.46
Self-Esteem	.42	.47	.29
Punishment from Behavior	.49	.56	.34
Punishment from Teacher	.50	.51	.37
Punishment from Others	.38	.32	.28
Guilt	.43	.48	.34
Teacher/Student Relationship: Positive	.61	.64	.47
Teacher/Student Relationship: Negative	.46	.50	.32
Legitimate-Higher Authority	.50	.55	.33
Legitimate-Teacher Authority	.49	.58	.41
Personal (Student) Responsibility	.64	.58	.47
Responsibility to Class	.63	.61	.58
Normative Rules	.50	.61	.44
Debt	.49	.59	.46
Altruism	.57	.62	.55
Peer Modeling	.55	.48	.42
Teacher Modeling	.53	.66	.45
Expert Teacher	.55	.72	.48
Teacher Feedback	.48	.63	.35